



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Trent 772
 UNIQUE ID NUMBER: 2RR023
 COMBUSTOR:
 ENGINE TYPE: MTF

BYPASS RATIO: 5.0
 PRESSURE RATIO (π_{00}): 35.8
 RATED THRUST (F_{00}) (kN): 315.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	3.5	16.4	78.9	1.6
AS % OF ORIGINAL LIMIT	18.0	13.9	70.7	9.4
AS % OF CAEP/2 LIMIT (NO _x)			88.4	
AS % OF CAEP/4 LIMIT (NO _x)			100.4	
AS % OF CAEP/6 LIMIT (NO _x)			111.9	
AS % OF CAEP/8 LIMIT (NO _x)			127.9	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 x OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	3.150	0.33	0.18	43.60	
CLIMB OUT	85	2.2	2.580	0.35	0.15	32.66	
APPROACH	30	4.0	0.840	0.81	0.78	10.68	
IDLE	7	26.0	0.270	0.97	9.36	5.74	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1096	735	4175	21462	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				2.3	13.3	68.1	1.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				1.23-3.18	12.29-14	67.7-68.4	1.1-1.5

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.6
TEMPERATURE (K)	293
ABS HUMIDITY (kg/kg)	0.0073-0.0084

FUEL

SPEC	AVTUR
H/C	1.94
AROM (%)	16

MANUFACTURER: Rolls-Royce plc
 TEST ORGANIZATION: Rolls-Royce plc
 TEST LOCATION: SINFIN-Derby
 TEST DATES: 01/07/1994

REMARKS

1. Data from certification report DNS 12859.
2. For SN by mode data use 3RR030 data

Compliance with Fuel Venting requirements: -

('x' if complies, 'PR' if pre-regulation, '-' if information is not available)